11-A

Notice of Allowability	Application No.	Applicant(s)	
	10/068,304	HINATA ET AL.	
	Examiner	Art Unit	
	Tarifur R Chowdhury	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *RCE filed on 01/04/05*.

2. ☒ The allowed claim(s) is/are *1-20*.

3. ☒ The drawings filed on *05 February 2002* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/04/05 has been entered.

Allowable Subject Matter

2. Claims 1-20 are allowed.

3. The following is an examiner's statement of reasons for allowance:

4. As to claims 1and 16, the prior arts of record do not anticipate or render obvious to one skilled in the art a liquid crystal display device or a method of forming such a device comprising various elements as claimed, more specifically a light-transmitting metal oxide film laminated on the reflective conductive film so that an outer edge of the metal oxide film is in contact with the first substrate and a black matrix formed on the second substrate overlapping the interval between the adjacent portions of the dot areas and having a width equal to the interval between the adjacent portions of the dot areas and narrower than the interval between the adjacent portions of the reflective conductive film.

As to claims 2 and 17, the prior arts of record do not anticipate or render obvious to one skilled in the art a liquid crystal display device or a method of manufacturing such a device comprising various elements as claimed, more specifically an underlying film formed on the first substrate, a reflective conductive film on or above the underlying film and a light transmitting metal oxide film laminated on the reflective conductive film so that an outer edge of the metal oxide film is in contact with the underlying film.

As to claim 6, the prior arts of record do not anticipate or render obvious to one skilled in the art a liquid crystal display device comprising various elements as claimed, more specifically a reflective conductive film on the first substrate, a light transmitting metal oxide film laminated on the reflective conductive film so that the edge of the metal oxide film is in contact with the first substrate and a reflective layer provided on the reflective conductive film for reflecting blue component light.

As to claim 11, the prior arts of record do not anticipate or render obvious to one skilled in the art a liquid crystal display device comprising various elements as claimed more specifically a light-transmitting metal oxide film laminated on the reflective conductive film so that the edge of the metal oxide film is in contact with the first substrate, the reflective conductive film and the metal oxide film forming a first electrode for applying a voltage to the liquid crystal and a second electrode formed on the second substrate wherein a display area comprises a collection of the crossing regions of the first and second electrodes, the wiring connected to the first electrode and the wiring connected to the second electrode are present outside the display area, and at least one of the wirings comprises a metal oxide to eliminate the reflective conductive film.

As to claims 19 and 20, the prior arts of record do not anticipate or render obvious to one skilled in the art a liquid crystal device or a method of manufacturing such a device comprising various elements as claimed, more specifically a light-transmitting metal oxide film formed over the reflective conductive film, the metal oxide film separated into adjacent portions by interval and having an edge that protrudes beyond the edge of the reflective conductive film and a shading film formed on the second substrate and being opposite the interval between the adjacent portions of the metal oxide film and having a width equal to the interval between the adjacent portions of the metal oxide film and narrower than the interval between the adjacent portions of the reflective conductive film.

The newly cited references such as: USPAT 5,327,001 discloses a liquid crystal display device wherein a single light shield film is formed on the second substrate to cover the channel portions of the transistors and having a width substantially equal to an interval between adjacent peripheral edges of the plurality of transparent electrodes. US 2002/0191134 discloses a reflective color liquid crystal display device having reflective conductive film, transparent metal oxide film and a black matrix. Further, JP 2000-066199 (Maeda) discloses a liquid crystal display device wherein a light-transmitting metal oxide film is laminated on the reflective conductive film so that an outer edge of the metal oxide film is in contact with the first substrate. However, all of the prior arts alone or in combination fail to teach or suggest the clamed liquid crystal display device or a method of manufacturing such a device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R Chowdhury whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRC
January 31, 2005

TARIFUR R. CHOWDHURY
PRIMARY EXAMINER